

5.(Amended) The screen of claim[1]2 wherein the optical faceplate is made from crystals selected from the group consisting of artificially grown crystals and synthesized crystals which do not exist in nature.

6.(Amended) The screen of claim[1]2 wherein the optical faceplate is made from a material having fibrous crystals which are transparent, colorless, work as a coherent faceplate, and comprise fibers having a numeric aperture of between about 0.2[-] and about 0.66.

7.(Unchanged) The screen of claim 6 wherein the material is selected from the group consisting of Ulexite, Selenite, Artinite and Aragonite.

8.(Unchanged) The screen of claim 6 wherein the optical faceplate is made of lab-grown Ulexite (NaCaB₅O₉ 8H₂O).

33.(New) The screen of claim 2 wherein the optical faceplates are tiled without a visible seam.

34.(New) The screen of claim 33 wherein the fibrous crystal has a fiber size on a scale of nanometers.

35.(New) The screen of claim 33 wherein the fibrous crystal has a pitch significantly less than that of glass.

36.(New) The screen of claim 2 wherein the fibrous crystal includes a dopant.

37.(New) The screen of claim 2 wherein the Ulexite is recrystallized natural Ulexite.

38.(New) A projection system for displaying an image, comprising:

a first diffusing assembly including a pre-screen comprising a plurality of seamlessly tiled optical faceplates of fibrous crystal;

a second diffusing assembly comprising a diffused rear projection screen, the faceplate being positioned to receive an image from the image source and to further diffuse said image; and

an image source for transmitting an image to the tiled optical faceplates.

39.(New) The system of claim 38 wherein the image source is positioned so as to transmit the image directly to the plurality of tiled optical faceplates

40.(New) The system of claim 38 wherein the image source includes a plurality of overlapping light sources.

41.(New) The system of claim 38 wherein the image source includes a device selected from the group consisting of image intensifiers, field flatteners, liquid crystal light valves (LCLVs), CCD arrays, X-ray imaging devices, CRT displays, and remote viewers.

42.(New) The system of claim 38 wherein the image source includes a collimated light source.

43.(New) The system of claim 38 wherein the optical faceplates are tiled without a visible seam.

44.(New) The system of claim 43 wherein the fibrous crystal has a fiber size on a scale of nanometers.

45.(New) The system of claim 43 wherein the fibrous crystal has a pitch significantly less than that of glass.

REMARKS

Applicant has considered the Office Action mailed on December 12, 2002, and the references cited therewith. This Amendment cancels claim 1, amends claims 2-6, and adds new claims 33-45, leaving claims 1-8 and 33-45 pending in the Application.



CLEAN VERSION OF PENDING CLAIMS

SEAMLESS REAR PROJECTION SCREEN

Applicant: Aleksandra Kolosowsky

Serial No.: 09/751,357

1. (Canceled)

2.(Amended) A projection screen for displaying an image from an image source, the screen comprising:

a first diffusing assembly including a pre-screen comprising a plurality of seamlessly tiled optical faceplates of fibrous crystal; and

a second diffusing assembly comprising a diffused rear projection screen, the faceplate being positioned to receive an image from the image source and to further diffuse said image.

3.(Amended) The screen of claim 2 further including an anti-reflection coating on a viewing side of said projection screen.

4.(Amended) The screen of claim 2 wherein the optical faceplate is made from fibrous crystals selected from the group consisting of crystals not found in nature, and crystals not found in nature in fibrous form.

~~5.(Amended) The screen of claim 2 wherein the optical faceplate is made from crystals selected from the group consisting of artificially grown crystals and synthesized crystals which do not exist in nature.~~

6.(Amended) The screen of claim 2 wherein the optical faceplate is made from a material having fibrous crystals which are transparent, colorless, work as a coherent faceplate, and comprise fibers having a numeric aperture of between about 0.2 and about 0.66.

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7.(Unchanged) The screen of claim 6 wherein the material is selected from the group consisting of Ulexite, Selenite, Artinite and Aragonite.

8.(Unchanged) The screen of claim 6 wherein the optical faceplate is made of lab-grown Ulexite (NaCaB₅O₉ 8H₂O).

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~~33~~.(New) The screen of claim 2 wherein the optical faceplates are tiled without a visible seam.

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~~34~~.(New) The screen of claim ³²~~33~~ wherein the fibrous crystal has a fiber size on a scale of nanometers.

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~~35~~.(New) The screen of claim ³²~~34~~ wherein the fibrous crystal has a pitch significantly less than that of glass.

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~~36~~.(New) The screen of claim 2 wherein the fibrous crystal includes a dopant.

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~~37~~.(New) The screen of claim 2 wherein the Ulexite is recrystallized natural Ulexite.

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~~38~~.(New) A projection system for displaying an image, comprising:

— a first diffusing assembly including a pre-screen comprising a plurality of seamlessly tiled optical faceplates of fibrous crystal;

a second diffusing assembly comprising a diffused rear projection screen, the faceplate being positioned to receive an image from the image source and to further diffuse said image; and

an image source for transmitting an image to the tiled optical faceplates.

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~~39~~.(New) The system of claim ³⁷~~38~~ wherein the image source is positioned so as to transmit the image directly to the plurality of tiled optical faceplates

CLEAN VERSION OF PENDING CLAIMS -

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 - EXPEDITED PROCEDURE

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~~40~~.(New) The system of claim ³⁷~~38~~ wherein the image source includes a plurality of overlapping light sources.

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~~41~~.(New) The system of claim ³⁷~~38~~ wherein the image source includes a device selected from the group consisting of image intensifiers, field flatteners, liquid crystal light valves (LCLVs), CCD arrays, X-ray imaging devices, CRT displays, and remote viewers.

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~~42~~.(New) The system of claim ³⁷~~38~~ wherein the image source includes a collimated light source.

⁴²
~~43~~.(New) The system of claim ³⁷~~38~~ wherein the optical faceplates are tiled without a visible seam.

⁴³
~~44~~.(New) The system of claim ⁴²~~43~~ wherein the fibrous crystal has a fiber size on a scale of nanometers.

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~~45~~.(New) The system of claim ⁴²~~43~~ wherein the fibrous crystal has a pitch significantly less than that of glass.

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concluded